

Chapter 21

Population, Urbanization and The Environment

Chapter Outline

- Demography and the U.S. Census
- Diversity and the Three Basic Demographic Processes
- Population Characteristics
- Theories of Population Growth Locally and Globally

Chapter Outline

- Checking Population Growth
- Urbanization
- Ecology and the Environment
- Globalization: Population and Environment in the Twenty-First Century

U.S. Population

- The population of the United States is presently more than 280 million.
- At the current rate of growth, the country will reach almost 300 million by the year 2025.
- The population has more than doubled since 1946, when it stood at about 132 million people.

Polling Question

- There should be government intervention in determining the maximum number of children people can have.
 - A.) Strongly agree
 - B.) Agree somewhat
 - C.) Unsure
 - D.) Disagree somewhat
 - E.) Strongly disagree

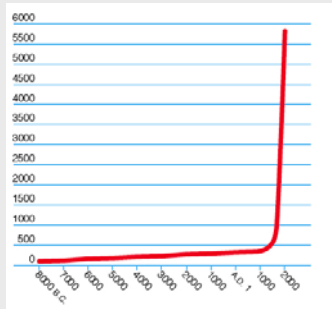
Demography and the U.S. Census

- *Demography* is the scientific study of the current state and changes over time in the size, composition, and distribution of populations.
- A *census* is a head count of the entire population of a country, usually done at regular intervals.
- *Vital statistics* include information about births, marriages, deaths, migrations in and out of the country, and other fundamental quantities related to population.

Three Demographic Processes

- The number of people in a society is determined by:
 - Births
 - Deaths
 - Migrations

World Population Growth in Millions



Birthrates in the United States

Group	Birthrates per Thousand
Whites	14.1
African Americans	17.6
Latinos	24.0
Native Americans	17.1
Asian Americans	17.8

Life Expectancy and Infant Mortality

Country	Life Expectancy	Infant Mortality Rate
Japan	80.8	3.9
Canada	79.6	5.0
France	78.9	4.5
United States	77.3	6.9
Russia	67.3	20.1

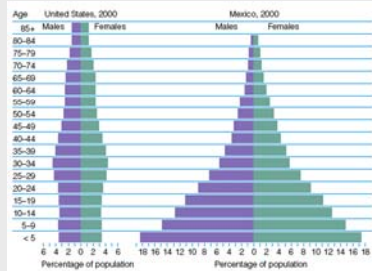
Death

- The U.S. ranks near the bottom among Western nations with a life expectancy of 76.2.
- The lower one's social class, the less one's life expectancy, regardless of gender.

Sex Ratio and the Population Pyramid

- The sex ratio is the number of males per 100 females, or the number of males divided by the number of females, times 100.
- A sex ratio above 100 means there are more males than females in the population; below 100, more females than males.
- In the United States, 105 males are born for every 100 females, for a sex ratio of 105.
- After factoring in male mortality, the sex ratio is 94—there are 94 males for every 100 females.

Comparison of Two Age-Sex Pyramids



Cohorts

- A cohort, consists of all the persons born within a given period.
- Over time, cohorts remain the same size or get smaller due to deaths, they never grow larger.
- If we know of death rates for this population, we can predict the size of the cohort as it passes through the stages of life from infancy through adulthood to old age.

The Baby Boom Cohort

- This cohort comprises nearly 1/3 of the entire population of the U.S. and has had a major impact on the practices, politics, preferences, and culture of our society.
- Raised in the relatively permissive late 1950s and 1960s, they became a part of the "Greed Generation" of the 1990s.
- As they begin to pass age sixty-five in 2010, the Baby Boom cohort will greatly increase the ranks of the elderly.

Malthusian Theory

- The idea that a population tends to grow faster than the subsistence needed to sustain it.
- Malthus noted that populations grow not by arithmetic increase but by exponential increase.
 - The number of individuals added each year increases, with the larger population generating an even larger number of births with each passing year.

Malthusian Theory

- Malthus failed to foresee three revolutionary developments that derailed his cycle of growth and catastrophe.
 - In agriculture, technological advances permitted farmers to work larger plots of land and grow more food per acre.
 - In medicine, science fought off diseases that Malthus expected to wipe out entire nations.
 - The development of contraceptives kept the birthrate at a level lower than Malthus thought possible.

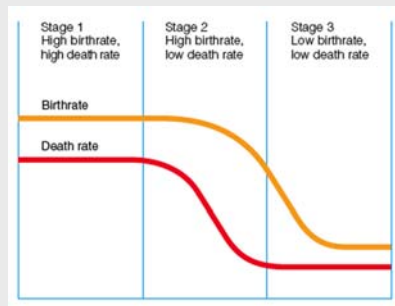
Demographic Transition Theory

- Proposes that countries pass through a predictable and consistent sequence of population patterns linked to the degree of technological development in the society, ending with a situation in which the birthrates and death rates are both relatively low.
- The population level is predicted to eventually stabilize, with little subsequent increase or decrease over the long term.

Demographic Transition Theory

- Population change involves 3 main stages:
 - Stage 1 is characterized by a high birthrate and high death rate.
 - Stage 2 is characterized by a high birthrate but a declining death rate, increasing the overall level of the population.
 - Stage 3 is characterized by a low birthrate and low death rate.
- The overall level of the population tends to stabilize in Stage 3.

Demographic Transition Theory



Zero Population Growth

- Achievement of zero population growth solves the problem of unchecked population growth.
- Zero population growth has been achieved in the United States and other countries.

Comparison of Demographic Theories	
Main Point	
Malthusian Theory	A population grows faster than the subsistence needed to sustain it.
Demographic Transition Theory	Populations go through stages from high birth and death rates to a stable population with low birth and death rates.
Zero Population Growth	Solves the Malthusian problem of unchecked population growth.

Comparison of Demographic Theories	
"Positive" Checks on Population Growth	
Malthusian Theory	Famine, disease, and war are likely.
Demographic Transition Theory	Famine, disease, and war are moderately likely.
Zero Population Growth	Famine, disease, and war are unlikely.

Comparison of Demographic Theories	
"Preventative" Checks on Population Growth	
Malthusian Theory	Sexual abstinence.
Demographic Transition Theory	Sexual abstinence, birth control, and contraceptive methods
Zero Population Growth	Sexual abstinence, birth control, and contraceptive methods.

Comparison of Demographic Theories

Prediction for the Future	
Malthusian Theory	Pessimistic, despite positive and preventive checks, a population will ultimately outstrip its food supply.
Demographic Transition Theory	Optimistic, given technology and medical advances in a population.
Zero Population Growth	Very optimistic; zero population- growth has already been achieved in the United States and other countries.

Urbanization

- Scholars locate the development of the first city at around 3500 B.C.
- The study of the urban, the rural, and the suburban is the task of *urban sociology*, a subfield of sociology that examines the social structure and cultural aspects of the city in comparison to rural and suburban centers.
- *Urbanization* is the process by which a community has the characteristics of city life and the "urban" end of the rural-urban continuum.

Theories of Urbanism

- **Simmel** - urban life leads individuals to avoid emotional involvement.
- **Wirth** - the city is a center of distant, cold interpersonal interaction.
- **Gans** - many city residents develop strong loyalties and have a sense of community.

Human Ecology and the Environment

Any society is an ecosystem with interdependent forces:

- human populations
- natural resources
- the environment

Human Ecology and the Environment

- Depletion of a natural resource affects other parts of the ecosystem.
- The United States alone uses more than 40% of the world's aluminum and coal as well as about 30% of its platinum and copper.
- Real estate development takes over millions of acres of farmland each year.
- In the western and southwestern United States, the groundwater supply is being depleted at a rapid pace.

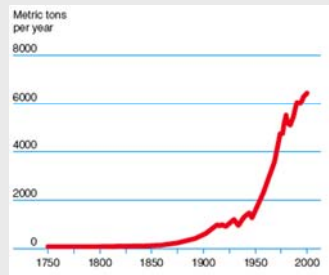
Polling Question

- Environmental pollution is one of the top five social problems in our country today.
 - A.) Strongly agree
 - B.) Agree somewhat
 - C.) Unsure
 - D.) Disagree somewhat
 - E.) Strongly disagree

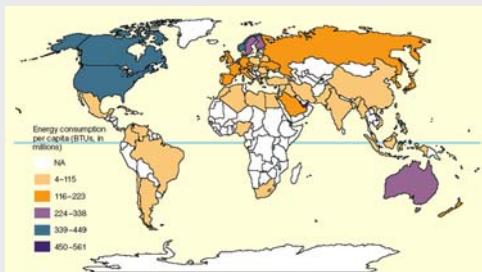
Total Hazardous Waste Sites by State



Worldwide Carbon Dioxide Emissions from Burning Fossil Fuels



Energy consumption per Capita



Environmental Racism and Classism

- Wastes are dumped disproportionately frequently in areas with high concentrations of minorities.
- Studies found a greater proportion of ethnic minority households closer to toxic sites even when considering households of comparable low-income status.

Feminism and the Environment

- Women tend to be more concerned with issues of environmental risk.
- Women were more likely than men to believe that abandoned waste sites cause health problems.

Globalization Population and Environment in the 21st Century

- The U.S. census predicts that the world's population will increase from the 6 billion it is now to 7.9 billion by the year 2020.
- A few years ago, the United Nations Division on Population estimated that the world population would stabilize as it reached 9 billion.
- That estimate has been revised to 10 billion, with a high estimate of as much as 14 billion.

Globalization Population and Environment in the 21st Century

- Sociologists predict that the United States will continue to experience increasing suburban development, with accompanying increases in heavy industry and additional pollution.
- Concerns today's sociologists have for the future:
 - The effect that a changing planet will have upon our lifestyle.
 - The effect our lifestyle will have on the planet.

Quick Quiz

1. The study of the current state and changes over time in the size, distribution, and composition of human populations is called:
 - a. etiology
 - b. ecology
 - c. urban planning
 - d. demography

Answer: d

- The study of the current state and changes over time in the size, distribution, and composition of human populations is called **demography**.

2. The idea that a population tends to grow faster than the subsistence needed to sustain it, is referred to as:

- a. human ecology
- b. population bomb
- c. Malthusian theory
- d. demographic transition theory

Answer: c

- The idea that a population tends to grow faster than the subsistence needed to sustain it, is referred to as **Malthusian theory**.

3. All of the following are what Malthus called 'positive checks' on population growth, except:
- a. disease
 - b. birth control
 - c. war
 - d. famine

Answer: b

- All of the following are what Malthus called 'positive checks' on population growth, except **birth control**.

4. Birthrate and family size are known to be related to the overall level of economic development of a country.
- a. True
 - b. False

Answer: True

- Birthrate and family size are known to be related to the overall level of economic development of a country.
